

Application No. 10/699,766

MXIC 1522-1
(P900383US)

Amendments to the Claims

In the claims:

This listing of claims will replace all prior versions and listings of claims in the application:

- 1 1. (currently amended) An integrated circuit, comprising:
2 a configurable logic array having a programmable configuration defined by configuration
3 data stored in electrically programmable configuration points within the configurable logic array;
4 a programmable configuration memory, adapted to store the configuration data;
5 memory ~~adapted to store~~ storing instructions for a mission function for the integrated
6 circuit, and ~~to store~~ storing instructions for a configuration function used to transfer the
7 configuration data from the configuration memory to the programmable configuration points
8 within the configurable logic array; and
9 a processor coupled to the memory which fetches and executes said instructions from the
10 memory.
- 1 2. (original) The integrated circuit of claim 1, wherein said memory comprises a non-volatile
2 store.
- 1 3. (original) The integrated circuit of claim 1, wherein said memory comprises a floating gate
2 memory store.
- 1 4. (original) The integrated circuit of claim 1, wherein said memory comprises a read-only
2 memory store.
- 1 5. (original) The integrated circuit of claim 1, wherein said memory comprises a first non-
2 volatile store for the configuration function, and a second store for the mission function.
- 1 6. (original) The integrated circuit of claim 1, wherein said memory comprises a first volatile
2 store for the configuration function, and a second store for the mission function.

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- 1 7. (original) The integrated circuit of claim 1, including a watchdog timer coupled to the
2 processor, and wherein the configuration function includes using the watchdog timer.
- 1 8. (original) The integrated circuit of claim 1, wherein the configuration function includes
2 loading the programmable configuration memory via an input port on the integrated circuit.
- 1 9. (original) The integrated circuit of claim 1, wherein the configuration function includes
2 receiving encrypted configuration data via an input port on the integrated circuit, decrypting the
3 configuration data, and loading the programmable configuration memory with decrypted
4 configuration data.
- 1 10. (original) The integrated circuit of claim 1, wherein the configuration function includes
2 receiving compressed configuration data via an input port on the integrated circuit,
3 decompressing the configuration data, and loading the programmable configuration memory
4 with decompressed configuration data.
- 1 11. (original) The integrated circuit of claim 1, wherein the programmable configuration memory
2 comprises a non-volatile store.
- 1 12. (original) The integrated circuit of claim 1, wherein the programmable configuration memory
2 comprises a volatile store.
- 1 13. (original) The integrated circuit of claim 1, wherein the electrically programmable
2 configuration points comprise non-volatile, charge programmable memory cells.
- 1 14. (original) The integrated circuit of claim 1, wherein the configuration function includes
2 loading the programmable configuration memory via an input port on the integrated circuit, and
3 including:
4 an interface between the processor and the configuration memory supporting said
5 loading; and

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6 an interface between the configuration memory and the configurable logic array
7 supporting said transfer of configuration data to the configurable logic array.

1 15. (previously presented) The integrated circuit of claim 1, wherein the configuration function
2 includes loading the programmable configuration memory via an input port on the integrated
3 circuit, and including:

4 an interface between the processor and the configuration memory supporting said loading
5 and said transfer of configuration data to the configurable logic array; and

6 an interface between the processor and the configurable logic array supporting said
7 transfer of configuration data to the configurable logic array.

1 16. (previously renumbered as 15).

1 17. (canceled).

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